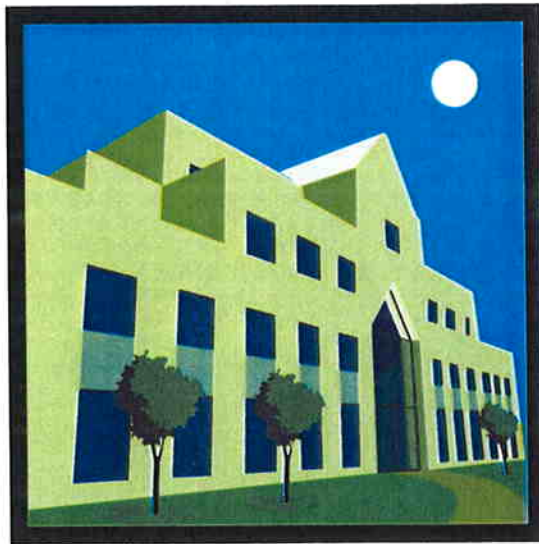


City of Ceres

# WATER EFFICIENT LANDSCAPE GUIDELINES AND STANDARDS

Two or More Dwellings and/or  
Nonresidential Development



*Adopted by City Council Resolution 94-27, February 28, 1994*

## City of Ceres

### WATER EFFICIENT LANDSCAPE GUIDELINES AND STANDARDS

#### Section 1.0: Purpose and Intent

The purpose of these Guidelines is to establish landscaping regulations that are intended to:

- A. Enhance the aesthetic appearance of development by providing standards relating to quality, quantity, and functional aspects of landscaping and landscape screening.
- B. Increase compatibility between various land uses, particularly between residential and abutting commercial and industrial land uses.
- C. Reduce the heat and glare generated by development.
- D. Reduce water consumption in the landscape environment using conservation principles. Comply with State laws requiring local agencies to adopt water-conserving landscape standards.
- E. Protect public health, safety, and welfare by minimizing the impact of all forms of physical and visual pollution, controlling soil erosion, screening incompatible land uses, preserving the integrity of neighborhoods, and enhancing pedestrian and vehicular traffic and safety.
- F. Provide developers and property owners with a better understanding of the City's expectations regarding the design and installation of landscaping and irrigation systems as currently required by Code.
- G. Establish a system to insure that the City's interests in landscaping and irrigation systems are carried out are both cost-effective and flexible. The City Council recognizes that minor deviations may be granted to these Guidelines, whenever such deviations are more likely to satisfy the purpose and intent of the Guidelines.

#### Section 2.0: Applicability

Section 3.0 of these Guidelines shall apply to the development of a lot with a single-family dwelling (including model homes) as a permitted use where the Ceres Zoning Ordinance requires the landscaping of the front yard (front setback) and exterior side yard (side setback). Section 4.0 of these Guidelines shall apply to all development projects that consist of two or more dwelling units on a single lot or lots, or nonresidential uses that are subject to the discretionary review and approval by the City of Ceres and where landscaping and irrigation systems are required by the Zoning Ordinance. Section 5.0, Definitions, and Appendix A shall apply to all developments regulated by these Guidelines.

#### **Section 4.0: Landscaping for Two or More Dwellings and/or Nonresidential Development**

The following process shall be observed in conjunction with the review and approval of landscaping and irrigation plans prepared in conjunction with two or more dwelling units and/or nonresidential developments:

- A. Concept Landscape Plan. A concept landscape plan shall be submitted as a part of each application for a discretionary permit. The concept plan shall meet the intent of these Guidelines by exhibiting a generalized design layout which adequately demonstrates the desired landscaping program in terms of location, size/scale, function, theme, and similar attributes. The concept plan shall provide the reviewing body with a clear understanding of the landscaping program prior to the preparation of a detailed, comprehensive landscape plan.
- B. Comprehensive Landscape and Irrigation Plan. A comprehensive landscaping and irrigation plan shall be prepared following the approval of an application for a discretionary permit by the final decision making body. The comprehensive landscaping plan shall be submitted with the application for a building permit. The standards and guidelines below provide the guidance needed to prepare an acceptable comprehensive landscaping and irrigation plan.

#### **Section 4.1: General Landscape Design Policies for Two or More Dwellings and/or Nonresidential Development**

The following landscape design policies are intended to assist the designer/landowner in understanding the City's expectations for landscaping associated with development in Ceres.

- A. Landscaping and open spaces should be designed as an integral part of the overall site plan design. Landscaping and open spaces should enhance the building design, enhance public views and spaces, provide buffers and transitions, provide for a balance of solar uses, and provide screening.
- B. Landscape design should accent the overall design theme through the use of structures such as arbors and trellises which are appropriate to the particular architectural style of adjacent structures.
- C. Landscaped areas should incorporate plantings utilizing a three tier system: (1) grasses and ground covers, including vines; (2) shrubs; and (3) trees.

- D. The following are common planting design concepts that should be used whenever possible:
- specimen trees used in informal groupings and/or rows at major focal points;
  - the use of native plants where possible;
  - extensive use of flowering vines both on walls and arbors;
  - pots, wall, or raised planters;
  - the use of planting to create shadow and patterns against walls;
  - trees to create canopy and shade, especially in parking areas;
  - the use of flowering trees in informal groups to provide color;
  - informal massing of colorful plantings;
  - use of distinctive plants as focal points;
  - berms, plantings, and low walls to screen parking areas from view of public rights-of-way while allowing filter views of larger buildings beyond.
- E. Planting areas between walls and streets, and buildings and streets should be landscaped in a hierarchy of plants in natural formations and groupings. Solid walls three feet (3'-0") or higher should receive vines, particularly when adjacent to public streets.
- F. A colorful landscape edge should be established at the base of buildings. Avoid asphalt edges at the base of structures as much as possible. Plant materials located in containers are appropriate.
- G. Planting masses on-site should assume a simple, non-uniform arrangement. The diversity of massing types should be great enough to provide interest, but kept to a level which evokes a relaxed natural feeling.
- H. Plants should be selected based upon their adaptability to the climatic, geological, and topographical conditions of the site. The planting of trees is encouraged, especially deciduous trees planted on the south side of buildings.
- I. Plants having similar water needs should be grouped together in distinct "hydrozones" so that the irrigation system can efficiently provide adequate water supplies.

## **Section 4.2: General Landscape Requirements and Development Standards for Two or More Dwellings and/or Nonresidential Development**

The following represent the minimum requirements and development standards for the landscaping of development that consists of two or more residential units and/or nonresidential development in the City of Ceres.

A. Water Conservation. The design of the landscaping shall be based on one of the two following methods:

1. *"Water Allowance" Method.* This method involves establishing a water allowance for each site, which provides the basis for the entire landscape program. A water allowance is simply the maximum amount of water that may be applied to a landscaped area (24.6 gallons per square foot of landscaped area on an annual basis). It is determined by the evapotranspiration rate for the Ceres area, adjusted to reflect both the water consumption of the plant materials involved and the efficiency of the irrigation system. This method involves designing landscapes with a mixture of low, medium, and even high water-using plants, if desired, provided that they be maintained within the water allowance determined for each site. The principal advantage is that it permits a greater degree of flexibility in the selection and arrangement of plant materials. The methodology for the water allowance method is described in Appendix A.
2. *"Prescriptive Format" Method.* The prescriptive format involves selecting plant materials that fit the following predetermined formula:
  - not more than 35% of the landscaped area planted with turf.
  - balance of landscaped area to consist of at least 90% in drought tolerant plant materials and not more 10% in plant materials with medium to high water needs.

For the prescriptive format, the developer shall submit the information required in Section 3.4. No water allowance calculations need be provided as long as the landscaping by type, meets the percentages listed above. Forms for the single-family application of this method are contained in Appendix B.

While this method restricts the selection and arrangement of plant materials, its principal advantage is that it is somewhat easier to understand and to implement than the water allowance method.

B. Trees.

1. Minimum tree size shall be fifteen gallon (15) unless another size is specified in certain situations.
2. When more than five (5) trees are required on a site, twenty percent (20%) of all required trees shall be 24 inch box size or larger.

3. Fifteen gallon (15) trees shall be double staked and planted in accordance with city standards.
4. All 24 inch box size or larger trees shall be supported with guy wires meeting city standards.
5. Trees varieties shall be long-lived (minimum of 50 years), clean, require little maintenance and be structurally strong and disease and pest resistant.
6. Trees planted adjacent to streets, parking areas and pedestrian walkways shall have a deep rather than shallow root system and be coordinated with any street trees located within the right-of-way.
7. Trees planted in turf areas should be provided with a three foot (3') diameter clear area around the trench.
8. Trees planted in paved areas shall have a protective tree grate and shall have a deep rather than shallow root system.

C. Shrubs.

1. Eighty percent (80%) of all shrubs shall be five (5) gallon size or larger unless another size is specified in certain situations.
2. Accent plants may be one (1) gallon in size.

D. Ground Cover/Turf.

1. The size and spacing of plants used for ground cover shall be based on the requirements for the specific plants to achieve 100 percent coverage within one year from being planted.
2. Where turf is used for ground cover, concrete mow strips shall be used to separate turf areas from other landscaped areas.
3. Drought tolerant grasses should be planted in turf areas unless specific conditions prevent the selection of these species.
4. When designing landscaping for a project using the "prescriptive format" method, areas devoted to turf shall not exceed 35% of the total landscaped area. Exceptions include: public parks, cemeteries, and golf courses.
5. Turf is not permitted in narrow planting strips (areas less than eight feet (8') wide), median strips and parking strips.

6. Turf is not recommended for berms and other areas with slopes in excess of 20%. The toe of turf-planted berms or sloped areas (greater than 5%) shall be located a minimum of 24 inches behind any curb, street or walkway.
7. Turf shall not be install within 24 inches of driveways or sidewalks unless a three inch (3") deep swale measured from the top of the hardscape is constructed at least three feet (3') back of the hardscape.

E. Rock-Stone and Mulch.

1. A minimum of three inches (3") of rock, gravel, or mulch (e.g. wood chips, bark, etc.) shall be required in conjunction with ground covers, shrubs and trees, provided that it does not become the dominant feature of the landscape program except for the few months after initial planting. Non-porous material such as impervious sheet plastic may not be placed under the mulch as it blocks the infiltration of rainwater and can cause runoff elsewhere on the site.
2. Inorganic materials such as rocks, stones, boulders and timbers may be incorporated into a landscape program only when used in conjunction with live plant materials and when limited to an accent feature.

F. Planters.

1. All planter areas shall provide positive drainage away from paved areas.
2. Planters should be separated from surrounding areas by a six inch (6") high curb of raised concrete or treated wood, or be recessed at least two inches (2") below the surrounding surface with a 4:1 slope away from any adjoining paved area.
3. All planters constructed adjacent to buildings or structures shall be designed to avoid water intrusion into the adjacent building or structure.

G. Irrigation Systems

1. All landscaped areas shall be provided with an approved automatic irrigation system that meets the criteria listed below:
  - Low pressure/low precipitation rate systems (e.g. drip irrigation, etc.) shall be used where high pressure/high precipitation systems are not required and a low pressure system can provide an adequate supply of water.

- Sprinkler heads irrigating turf or other high-water-demand landscape areas shall be circuited so that they are on a separate zone or zones from those irrigating trees, shrubbery or other reduced-water requirement areas.
- The system shall be designed to minimize over spray onto impervious surfaces such as sidewalks, buildings, parking areas, etc., through the use of such techniques as low-trajectory spray nozzles, underground or low-volume applicators.
- Sprinklers should not be installed immediately adjacent to sidewalks and other impervious areas but should be set inward in turf areas and other planting areas.
- Automatic irrigation controllers shall have multiple cycle capabilities; electronic controllers shall have a battery backup.
- Automatic irrigation controllers shall be programmed within the days and hours established by any water conservation program adopted by the City of Ceres.
- Rain sensing override devices shall be installed on all irrigation systems.
- Serviceable check valves are required where elevation differences may cause low head drainage.

**Section 4.3: Specific Landscape Requirements and Development Standards for Two or More Dwellings and/or Nonresidential Development**

- A. Landscape Buffers. One of the three landscape buffers described below, intended to provide varying degrees of separation and privacy between activities located on adjoining properties, shall be provided along the perimeter of a developing property in accordance with Table 1. It is the sole responsibility of the developing property to install the landscape buffer; any participation from an adjoining property is strictly voluntary. The installation of a landscape buffer may be waived or appropriately modified by the Planning Director where existing conditions eliminate or limit the need for a landscape buffer.





1. Maximum

- Masonry wall (stucco finish not recommended) six to eight feet (6'-8') high with climbing vines adjacent to wall.
- Densely planted landscape strip 10-15 feet-wide containing trees, shrubs and/or ground cover.
- Small tree varieties planted 30 feet apart or large tree varieties planted 40 feet apart.

**Landscape Buffer - Maximum**



**Small Trees Planted 30' on Center  
Screening Shrubs  
6' to 8' Masonry Wall**



**Large Trees Planted 40' on Center  
Screening Shrubs  
6' to 8' Masonry Wall**

## 2. Medium

- Wood-pilaster fence six to eight feet (6'-8') high (densely planted evergreen hedge may be substituted with the approval of the Planning Director) with climbing vines on fence.
- Densely planted landscape strip five to ten feet (5'-10') wide containing trees, shrubs and/or ground cover. Turf not permitted in narrow planting strips (area less than 8' wide).
- Small tree varieties planted 30 feet apart or large tree varieties planted 40 feet apart.

**Landscape Buffers - Medium**



**Small Trees Planted  
30' on Center  
Screening Shrubs**



**Large Trees Planted  
40' On Center  
6' High Fence**

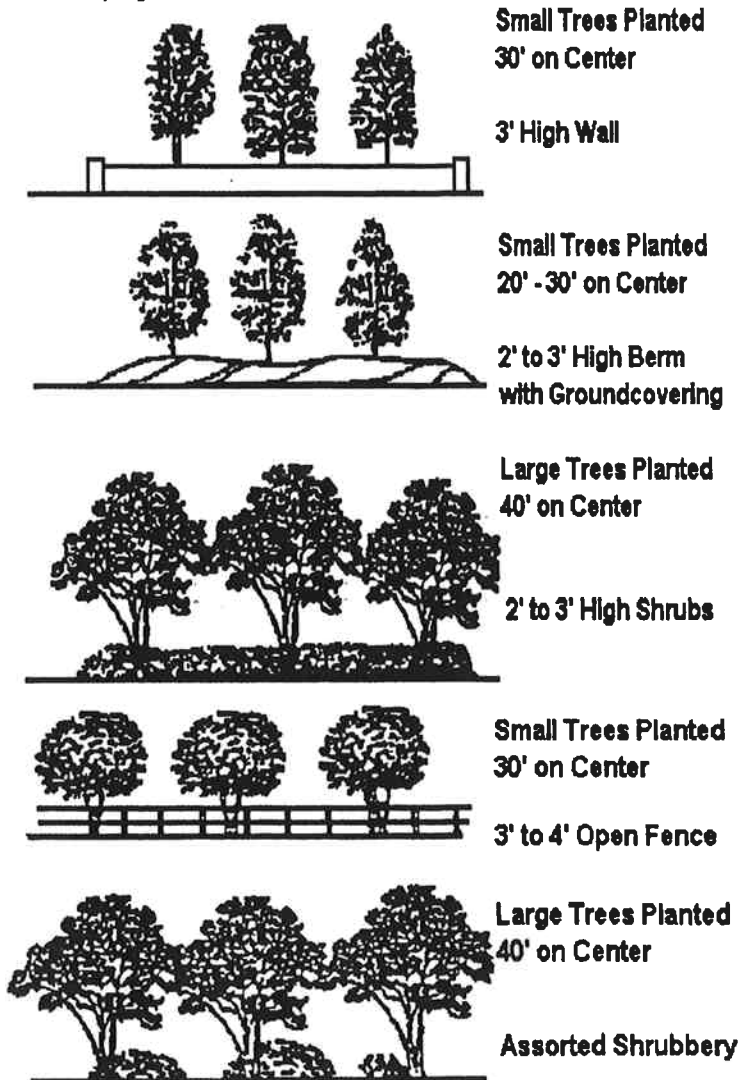


**Tall Evergreen Trees  
Stagger Planted**

### 3. Minimum

- Rolling berm with ground cover, preferably with low spreading shrubs, two to three feet (2'-3') high, or open fence three to four feet (3'-4') high, or evergreen hedge two to three feet (2'-3') high (see Section 4.2, D. Ground Cover/Turf for more detail).
- Sparsely planted landscape strip three to five feet (5') wide containing trees, shrubs and accent plants or non plant materials (e.g. rocks, boulders, etc.).
- Small tree varieties planted 30 feet apart or large tree varieties planted 40 feet apart.

#### Landscaping Buffer - Minimum



B. Sound Walls. Sound walls are identified in the Noise Element as a feasible method to mitigate the excessive noise generated on the city's expressways, arterials and high-volume collector streets. Landscaping is needed to make these noise barriers a community asset and to prevent them from becoming graffiti covered visual blight. As a result, the standards described below shall apply to the installation of sound walls.

- Masonry wall (stucco finish not permitted) eight to ten feet (8'-10') high with climbing vines adjacent to wall.
- Densely planted landscape strip ten feet (10') wide containing trees, shrubs and/or ground cover (landscape strips less than ten feet (10') wide may be considered if the density of plants is increased).
- Small tree varieties planted 30 feet apart or large tree varieties planted 40 feet apart.

**Sound Wall**



**Small Trees Planted 30' on Center**  
**Screening Shrubs**  
**8' to 10' Masonry Wall**

C. Screening Requirements. All trash and refuse containers, areas provided for the storage and collection of recyclable materials, outdoor storage areas, transformers, backflow, metering devices, and ground mounted equipment or devices shall be screened from public view using walls or fences and supplemented by evergreen trees, shrubs and vines where possible. Plant materials used for screening shall meet the size and spacing standards described below.

- Trees - 24 inch box planted 10 feet (10') apart.
- Shrubs - five (5) gallon planted at a minimum of three feet (3') apart.
- Vines - five (5) gallon planted at a minimum of five feet (5') apart.

### Screening



**Tall Evergreen Trees  
Stagger Planted**

- D. Trash/Refuse Containers and Recyclable Materials Storage and Collection. In addition to the screening requirements outlined in C. above, areas provided for the storage and collection of recyclable materials shall be sized in accordance with the applicable table below. Materials such as paper, cardboard, or similar materials that are adversely affected by the rain shall be protected either by covering the area or the materials themselves.

Residential Development:

<u>No. Units</u>	<u>Trash/Refuse (sq. ft.)</u>	<u>Recyclable Materials (sq. ft.)</u>	<u>Total Area (sq. ft.)</u>
2 - 6	12	12	24
7 - 15	24	24	48
16 - 25	48	48	96
26 - 50	96	96	192
51 - 75	144	144	288
76 - 100	192	192	384
101+	Every additional 25 dwelling units shall require an additional 48 sq. ft. for trash and 48 sq. ft. for recyclable materials.		

Nonresidential Development:

<u>Bldg. Size (sq. ft.)</u>	<u>Trash/Refuse (sq. ft.)</u>	<u>Recyclable Materials (sq. ft.)</u>	<u>Total Area (sq. ft.)</u>
0 - 5,000	12	12	24
5,000 - 10,000	24	24	48
10,001 - 25,000	48	48	96
25,001 - 50,000	96	96	192
50,001 - 75,000	144	144	288
75,001 - 100,000	192	192	384
100,000+	Every additional 25,000 sq. ft. of floor area shall require an additional 48 sq. ft. for trash and 48 sq. ft. for recyclable materials.		

E. Parking Lots. Not less than five percent (5%) of the interior (within the perimeter of the parking lot) of all off-street parking lots with five (5) or more spaces as described below shall be landscaped. The landscaping of parking lots should be integrated and consistent with the landscaping provided for other areas of a property.

1. Interior

- One tree for every eight parking spaces.
- All portions of parking lots not used for parking, maneuvering or pedestrian access shall be landscaped with a mixture of ground cover, trees, shrubs or other plants.
- Landscaped areas shall be enclosed by a four inch (4") high by six inch (6") wide continuous concrete curb.
- Landscaped tree islands shall have a minimum dimension of four feet (4'), exclusive of curbing (six feet (6') if curb also used as a wheel stop).
- A mixture of trees is recommended -- no more than three predominant tree types.
- Plants that restrict vehicular or pedestrian visibility shall be avoided.

